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(54) Title: PROCESS FOR RECOVERY OF THE SILICA PRESENT IN THE SEPARATORS BETWEEN THE ELEMENTS OF LEAD-ACID BATTERIES

(57) Abstract: A process for recovery of the silica present in the separators located between the elements of lead-acid batteries characterized in that it comprises the following operations: a) washing the heavy plastics to remove the lead compounds and other foreign bodies, b) separating the plastics from the washing solution, c) lead recovery and regeneration of the washing solution, d) rinsing of the plastics, e) drying of the plastics, f) separation of the granular plastics from the thin plastics (polyethylene with silica filler, PVC, fabrics) by drawing them up in a flow of air making use of the shape effect, g) separation of the PVC and fabrics from the polyethylene with silica filler through fragmentation, h) pyrolysis of the polyethylene with silica filler, i) cracking of the pyrolysis gases and vapours in order to reduce their molecular weight and render them more suitable for handling and combustion to provide the heat necessary for pyrolysis, j) oxidation of the pyrolysis residue to remove carbonaceous residues and recover the silica, k) pyrolysis of the mixture of PVC and fabrics presence of alkaline substances, l) oxidation of the residue from the pyrolysis of PVC and fabrics with the production of inert ashes is described.